

Work Order ID 51188

August 6, 2009 2:31:55 PM



Page 1

Item ID: D3278-3

Accept



Setup Start



Revision ID: C

Stop



Item Name: Spacer

Start Date: 8/14/09 Start Qty: 40.00



Cust Item ID:

Required Date: 8/21/09 Req'd Qty: 40.00

Customer:

Reference:

Approvals:

Process Plan: *W*

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Draw Number | Draw Rev. | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D3278 | Rev C | | | | | | | | |

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3278
Deburr if necessary

☐ Dwg Rev: C ☐ Prog Rev: C ☐ 2-

M.H. 09/08/13

IB 9-8-13



110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

IB 9-8-13

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

2) 08/08/14

counter
(55)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

Work Order ID 51188

August 6, 2009 2:31:55 PM



Page 2

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Cust Item ID:

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

1-C'sink as per dwg D3278-2-Deburr

08/09/08/19 55

140

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

=) 8/09/08/19

count 55

150

0.00



Identify as per dwg & Stock Location: 78

Packaging

Memo

0.00

Packaging

8/18/19 55 SP

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 51188

August 6, 2009 2:31:55 PM



Page 3

Item ID: D3278-3

Accept



Setup Start



Revision ID: C

Stop



Item Name: Spacer

Start Date: 8/14/09 Start Qty: 40.00



Cust Item ID:

Required Date: 8/21/09 Req'd Qty: 40.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/08/24 *[Signature]*

MF
09-08-21

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 1 / 1

August 6, 2009 2:31:54 PM

Work Order ID: 51188

Parent Item: D3278-3RevC

Parent Item Name: Spacer

Comments:

Start Date: 8/14/09

Required Date: 8/21/09

Start Qty: 40.00

Required Qty: 40.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| MDELRINS0.125 | | Purchased | No | | | 110 | sf | 13.8200 | 1.4484 | SS | | |



Black Delrin Sheet .125

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u> | | |
| Main Warehouse | | |
| MAT | 13.82 | |
| 101657 | 1 | |
| 104803 | 8.82 | |
| 15607 | 4 | |

104803

103 9-8-13

SS

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| | | |
|-----------------------|--------|----------------------|
| DART AEROSPACE LTD | | Work Order: 51188 |
| Description: Spacer | | Part Number: D3278-3 |
| Inspection Dwg: D3278 | Rev: C | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| 1.98 | +/-0.030 | 1.982 | * | | | |
| 1.98 | +/-0.030 | 1.983 | * | | | |
| 1.480 | +/-0.005 | 1.477 | * | | | |
| 0.250 | +/-0.010 | .249 | * | | | |
| 1.480 | +/-0.005 | 1.477 | * | | | |
| 0.250 | +/-0.010 | .250 | * | | | |
| Ø0.098 | +0.005/-0.000 | .100 | * | | | |
| R0.13 | +/-0.030 | .13 | * | | | |
| 0.125 | +/-0.010 | .126 | * | | | |
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|----------------|----------------|---------------------|-----|
| Measured by: B | Audited by: S | Prototype Approval: | N/A |
| Date: 9-8-13 | Date: 09/02/14 | Date: | N/A |

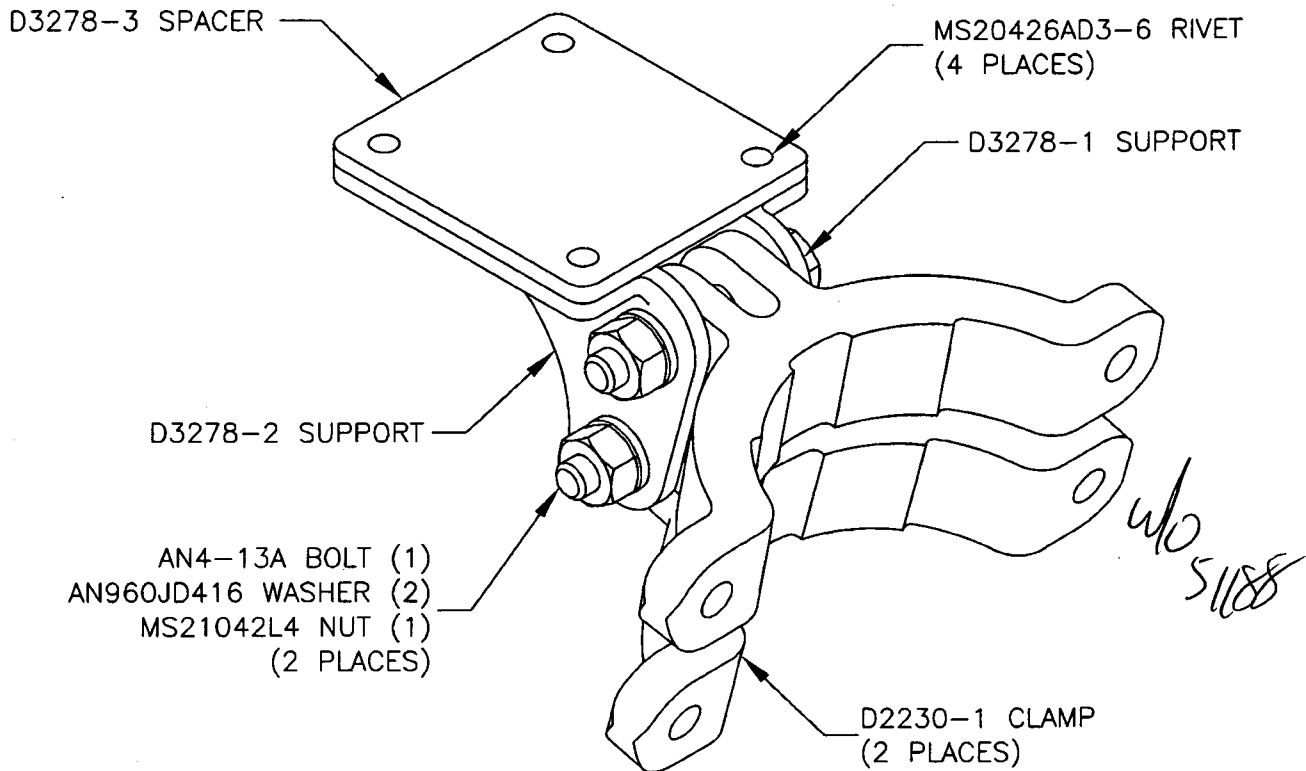
| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------------------------------|------------|----------|
| A | 04.04.19 | New Issue P/O D3278-041 | KJ/JLM | |
| B | 06.03.09 | Dwg Rev updated | KJ/JLM | |
| C | 07.02.02 | Dwg updated per JLM | KJ/JLM | |
| D | 07.09.26 | Dimensions updated per Dwg Rev. C | KJ/EC | B |

DART

| | | | |
|-------------------------------|--------------------------------|---|------------------------|
| DESIGN <i>97</i> | DRAWN BY <i>BC</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3278 | REV. C SHEET 1 OF 3 |
| DATE 07.07.24 | | TITLE SUPPORT ASSEMBLY | SCALE NTS |
| A | 04.03.03 | NEW ISSUE | |
| B | 05.03.31 | CHANGE DIM/TOL TO ENSURE FIT | |
| C | 07.07.24 | CHANGED RIVETS PER PAR #185 | |

RELEASED
07-08-08

D3278-041 SUPPORT ASSEMBLY



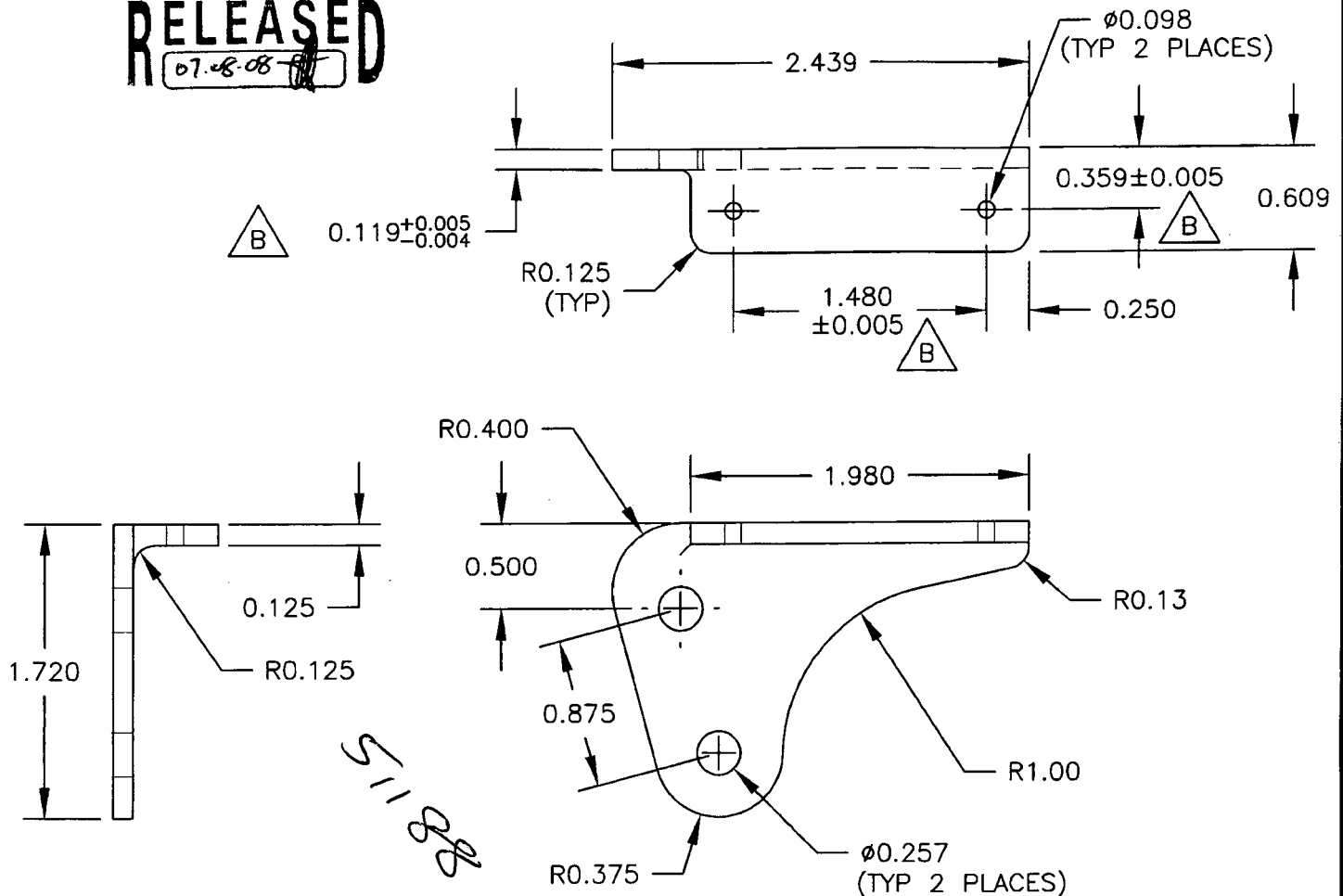
| Qty | Part Number | Description |
|-----|--------------|------------------|
| X | D3278-041 | SUPPORT ASSEMBLY |
| 2 | D2230-1 | CLAMP |
| 1 | D3278-1 | SUPPORT |
| 1 | D3278-2 | SUPPORT |
| 1 | D3278-3 | SPACER |
| 2 | AN4-13A | BOLT |
| 4 | AN960JD416 | WASHER |
| 4 | MS20426AD3-6 | RIVET |
| 2 | MS21042L4 | NUT |

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DART

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|----------------------|-----------------------|---|------------------------|
| DESIGN <i>GP</i> | DRAWN BY <i>BC</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>AB</i> | APPROVED <i>H</i> | DRAWING NO. D3278 | REV. C SHEET 2 OF 3 |
| DATE 07.07.24 | | TITLE SUPPORT ASSEMBLY | SCALE 1:1 |

RELEASED
07-08-08**D3278-1 SUPPORT (SHOWN)****D3278-2 SUPPORT (OPPOSITE)**

- 1) MACHINE PER DWG FILE "D3278-1.SLDPRD"
- 2) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B)
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

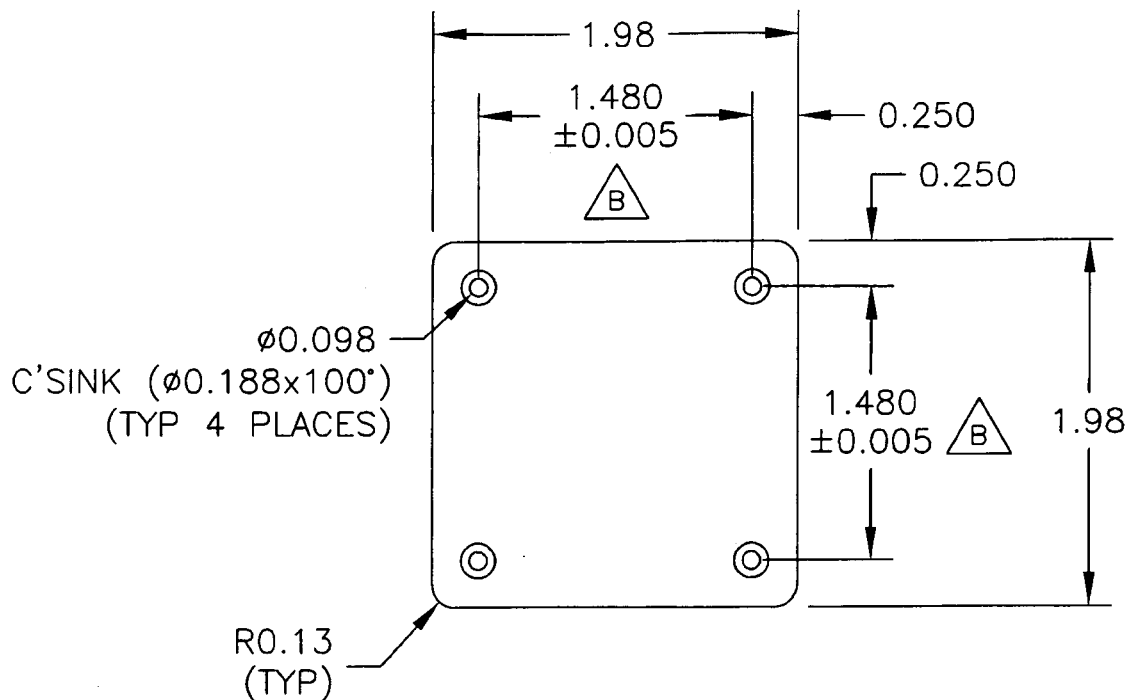
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| DESIGN <i>GP</i> | DRAWN BY <i>DC</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3278 | REV. C SHEET 3 OF 3 |
| DATE 07.07.24 | | TITLE SUPPORT ASSEMBLY | SCALE 1:1 |

RELEASED
07.08.08



D3278-3 SPACER

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL
(REF. DART SPEC. M-DELRIN-B0.125x2.000) OR
DELRIN II 150E OR ACETRON GP ACETAL
(REF. DART SPEC. M-DELRIN-S.125)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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